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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/543,049	07/21/2005	James William Godfrey	PB60017USW	3927

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EXAMINER	
OSTRUP, CLINTON T	
ART UNIT	**PAPER NUMBER**
3771	

NOTIFICATION DATE	DELIVERY MODE
04/14/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/543,049	GODFREY, JAMES WILLIAM	
	Examiner	Art Unit	
	CLINTON OSTRUP	3771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19,24,25 and 28-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19,24,25 and 28-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 July 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/30/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the amendment filed January 30, 2009. As directed by the amendment, claim 19 has been amended; claims 1-18, 20-23, and 26-27 are cancelled and claim 54 has been added. Thus, claims 19 and 24-25, and 28-54 are pending in this application.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 19, 24-25, 28-30 rejected under 35 U.S.C. 102(b) as being anticipated by McOnie (5,192,085).

Regarding claim 19, McOnie discloses a method of fixing a first part (48) of a multi-part assembly (figure 1) to a second part (12) thereof which comprises providing a fixation device (27) having a ring body (27) is comprised of 14 & 16 which form a ring prior to fractionation (see: co. 2, lines 25-35; col. 5, lines 20-43 and col. 5 lines 63-66)) which is manufactured with an endless angular extent (prior to fracture) and an integrally formed weakened zone (41 at cut line 36) therein, forming an axial split in the body at the weakened zone (41 at cut line 36), and interposing the fixation device between the first (48) and second (12) parts such that the first and second parts are fixed together through the fixation device (27), in which the weakened zone (41 at cut line 36) is a structural discontinuity in the body (a notch is formed at 41 prior to cutting

through the cut line 36), wherein the structural discontinuity is a notch (a notch is formed in ring 27 that is formed by 41 when the cut line in 14 is in tact (see: col. 2, lines 25-33), wherein the ring body (27) has radially spaced-apart inner (inside ring 27) and outer (outside ring 27) circumferential surfaces, and wherein the notch extends from the inner circumferential surface to the outer circumferential surface (27 of figure 1).

Regarding claim 24, McOnie discloses forming an axial split (by cutting cut line 36) in the [ring] body at the weakened zone (41 at cut line 36) which gives the body a generally C-shape (27 of figure 1).

Regarding claim 25, McOnie discloses a fixation device (27) that consists of the ring body (27 of figure 1).

Regarding claim 28, McOnie discloses a fixation device (27) is wedged (forced or packed in) between the first (48) and second (12) parts.

Regarding claim 29, McOnie discloses a fixation device that wedged between an outer surface (49) of the first part (48) and an inner surface (30) of the second part (12). See: col. 4, lines 55-57; col. 5, lines 44-58 and col. 6, lines 29-35.

Regarding claim 30, McOnie discloses the inner surfaces (30 of 12) are a re-entrant surface (tapered surface).

Regarding claim 48, McOnie discloses an axial split (at cut line 36) is irreversibly formed (it is cut) in the [ring] body (27).

Regarding claim 49, McOnie discloses a ring body 927) that has a longitudinal axis (it is three dimensional) and a cross-sectional shape (horizontal cross section taken

will still be a ring and a vertical cross section will be symmetrical as the fixation device is a ring) which is symmetrical about an axis which is transverse to the longitudinal axis.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 19, 24-38, and 43-54 are rejected under 35 U.S.C. 103(a) as being unpatentable Brand et al., (WO 01/2887 A1) in view of McOnie (5,192,085) and further in view of Trimmer (4,151,779).

Brand, teaches a ring-like fixation device (125, 225, 325, & 425) and a method of using the ring-like device for fixing an aerosol canister (120, 220, 320, & 420) to dose indicating device (100, 200, 300, & 400). Brand teaches the fixation device as a split-ring and that it can be wedged between the tubular sleeve and the neck of the canister.

Moreover, applicant has admitted in the specification, how Brand teaches a "fixation device of the type defined… for connecting a device housing to the business end of an aerosol canister." Applicants further admits that the fixation device taught by Brand, "has a ring-like body… having an axial split;" however, applicant contends that "the fixation device is integrally formed with the split in the body." Thus, the aim of the present invention, according to applicant's specification is to provide a fixation device that avoids a problem associated with forming split-rings in mass production, namely the rings becoming entangled with one another. Thus, the question is whether forming a

ring with a weakened zone and then splitting the ring at the weakened zone, to form the same ring described by Brand et al., and then using the ring to fix the same components disclosed by Brand together is unobvious over the teachings of Brand et al. taken together with what is known in the prior art.

First, it should be noted that Brand is silent with respect to how their fixation device is formed and that the final fixation device, as claimed instantly, becomes the same fixation device taught by Brand after the weakened zone is removed and that the fixation device is ultimately being used to form the same apparatus as disclosed by Brand (i.e. compare figures 3-4c with Brands figures 2 & 4a-4c).

Therefore, Brand teaches a method of using the fixation device, as claimed, however, Brand lack the specific teaching of forming a ring body with a weakened zone instead of a ring body with an axial split as claimed in claims 19 and 24-25, and 28-54 in which the weakened zone is a structural discontinuity in the body, wherein the structural discontinuity is a notch, wherein the ring body has radially spaced-apart inner and outer circumferential surfaces, and wherein the notch extends from the inner circumferential surface to the outer circumferential surface.

McOnie discloses a method of fixing a first part (48) of a multi-part assembly (figure 1) to a second part (12) thereof which comprises providing a fixation device (27) having a ring body (27) is comprised of 14 & 16 which form a ring prior to fractionation (see: co. 2, lines 25-35; col. 5, lines 20-43 and col. 5 lines 63-66)) which is manufactured with an endless angular extent (prior to fracture) and an integrally formed weakened zone (41 at cut line 36) therein, forming an axial split in the body at the

weakened zone (41 at cut line 36), and interposing the fixation device between the first (48) and second (12) parts such that the first and second parts are fixed together through the fixation device (27), in which the weakened zone (41 at cut line 36) is a structural discontinuity in the body (a notch is formed at 41 prior to cutting through the cut line 36), wherein the structural discontinuity is a notch (a notch is formed in ring 27 that is formed by 41 when the cut line in 14 is in tact (see: col. 2, lines 25-33), wherein the ring body (27) has radially spaced-apart inner (inside ring 27) and outer (outside ring 27) circumferential surfaces, and wherein the notch extends from the inner circumferential surface to the outer circumferential surface (27 of figure 1).

Trimmer teaches that it is desirable to form rings with weakened zones in order to form rings that can be split without becoming entangled with other rings. See: col.1, lines 11-35 and col. 3, lines 16-20.

It would have been obvious to one having ordinary skill it the art at the time the invention was made to provide Brand's ring with a breakable weakened zone, as taught by McOnie, since a ring with a weakened zone that can be fractured at its weakened zone and then used as a split ring as taught by McOnie and one would be motivated to form such a ring and use it in a method of forming the device of Brand because of the reasonable expectation of obtaining a ring that that can be manufactured with an easily breakable weakened zone without the disadvantageous entangling of the rings, as taught and suggested by Trimmer.

Regarding claim 24, McOnie discloses forming an axial split (by cutting cut line 36) in the [ring] body at the weakened zone (41 at cut line 36) which gives the body a generally C-shape (27 of figure 1).

Regarding claim 25, Brand discloses a fixation device (325) consists of the ring body. See: figures 4a-4c.

Regarding claim 28, Brand discloses a fixation device (325) is wedged between the first (320) and second parts (300). See: figures 4a-4c.

Regarding claims 29-30, Brand discloses a fixation device is wedged between an outer re-entrant surface (outer upper edge of 321) of the first part and an inner (302) reentrant surface of the second part (300).

Regarding claim 31, Brand discloses the re-entrant surface as the outer surface (outer upper edge of 321) of the first part (320).

Regarding claim 32, Brand discloses the inner surface (302) is presented by a skirt (302) of the second part which extends about the outer surface of the first part (figure 4c).

Regarding claim 33, Brand discloses a first part (320) which has a longitudinal axis and the fixation device (325) prevents removal of the second part (300) from the first part in a first axial direction. See: figures 4a-4c.

Regarding claim 34, Brand discloses first (320) and second (300) parts each having an abutment surface in abutting relation to prevent the second part being removed from the first part in a second axial direction. See: figures 4a-4c.

Regarding claim 35, Brand discloses the multi-part assembly is a product dispenser (medicament dispenser) with the first part (320) a product container (canister).

Regarding claim 36, Brand discloses the second part (300) is an accessory (housing) of the dispenser.

Regarding claim 37, Brand discloses a first part (320) that has a longitudinal axis, a lateral end surface, and a longitudinal side surface which extends towards the end surface in a first axial direction and which has a profile which tapers laterally outwardly in the first axial direction, and the second part (300) has a longitudinal axis, a lateral surface and a longitudinal skirt (302), wherein the first and second parts are assembled with the axes aligned (figures 4a-4c), the respective lateral surfaces in bearing relation and the skirt spaced laterally from the tapered profile of the longitudinal side surface of the first part, and the body (325) of the fixation device is wedged in a radially expanded condition in the space between the skirt and the tapered profile. See: page 11, line 29 - page 12, line 9 and figures 4a-4c.

Regarding claim 38, Brand discloses the body (325) of the fixation device is conjoined to the skirt (page 11, line 29 - page 12, line 10.

Regarding claim 43, it appears Brand teaches a ring molded from a plastic material, as Brand describes ultrasonically welding it to the sleeve; however, Brand lacks specifically describing the ring as molded plastic. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the weakened ring out of a molded plastic material, since it has been held to be within

the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In the instant case, metered dose inhalers and their components are typically molded of plastic materials.

Regarding claim 44, Brand discloses the re-entrant surface is a tapering surface (See: figure 4a between ferrule 322 and neck 321) which tapers in a first direction and the fixation device (325) is moved in the first direction over the tapering surface until it is wedged between the tapering surface and the inner surface(302) of the second part (302).

Regarding claim 45, Brand discloses the ring body has radially spaced-apart inner and outer circumferential surfaces (the inner and outer surfaces of the ring) and the inner circumferential surface bears against an outer surface (between 321 & 322) of the first part (320) and the outer circumferential surface bears against an inner surface (302) of the second part (300).

Regarding claim 46, Brand discloses the outer circumferential surface is conjoined to the inner surface (302) of the second part. See: page 12, lines 7-9.

Regarding claim 47, Brand discloses the second part (300) as a cap (it covers the top of 320) slidingly received on the first part (320). See: figures 4a-4c.

Regarding claim 48, McOnie discloses an axial split (at cut line 36) is irreversibly formed (it is cut) in the [ring] body (27).

Regarding claim 49, Brand discloses a ring body (325) that has a longitudinal axis and a cross-sectional shape which is symmetrical about an axis which is transverse to the longitudinal axis. See: figures 4a-4c.

Regarding claim 50, Brand discloses the fixation device (325) is mounted to the first part (figure 4b), the second part is mounted to the first part (figure 4c) to form a gap there between and the fixation device is wedged in the gap between the first and second parts. See: page 11, line 29 - page 12, line 9.

Regarding claim 51, McOnie teaches forming an axial split (36 and 41 of figure 1) and Brand discloses applying a ring with an axial split to mount the fixation device (325) on the first part (320). See: Brand, figures 4a-4c.

Regarding claim 52, Brand discloses the first part (320) presents an outer surface facing the gap (figure 4c) which tapers outwardly (the area from the ferrule 322 to, and including, the neck 321) in a first direction and the fixation device (325) is moved over the outer surface in the first direction until it is wedged in the gap. See: figure 4c.

Regarding claim 53, Brand discloses the fixation device (325) as conjoined to the second part (300) once wedged in the gap. See: page 11, line 29 - page 12, line 9.

Regarding claim 54 Brand discloses a ring body has a circumferential wall ((wall around ring), the circumferential wall having an axial dimension (when relaxed as shown in figure 4a), and wherein the notch provides the ring body with a circumferential zone of reduced axial dimension (when wedged between tubular sleeve 302 and the neck of canister 321 as shown in figure 4c). See: Brand, page 11, line 29 - page 12, line 9.

6. Claims 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable Brand et al., (WO 01/2887 A1) in view of McOnie (5,192,085) and Trimmer (4,151,779), as applied to claim 19 above and further in view of Stearns et al., (2,648,578).

The combined references disclose all the limitations of claim 39, except the axial split being formed by applying a radial force.

Stearns teaches forming an axial split by applying a radial force on the body. See: col. 3, line 59 - col. 4, line 11 and figure 3.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of forming an axial spit in the ring as disclosed by the combined references, by applying a radial force to the ring, as taught by Stearns because of the reasonable expectation that one method of forming an axial split at a weakened zone could be substituted for another method of forming an axial split at a weakened zone with the same results (i.e. a ring that is broken at the weakened zone).

Regarding claim 40, Stearns teaches the radial force as a radial outward force. See: col. 3, line 59 - col. 4, line 11 and figure 3.

Regarding claims 41-42, by applying a ring with a weakened zone, as taught by McOnie, to the neck (321 of Brand) the ring would necessarily pass over (ferrule 322) which is a tapered structure. Thus, the axial split would be formed by radially expanding the ring using the method disclosed by Stearns (axial force in an outward direction) by inserting the tapered ferrule (322 of Brand) into the ring body.

Response to Arguments

7. Applicant's arguments with respect to claims 19, 24-25 & 28-54 have been considered but are moot in view of the new ground(s) of rejection.

Remarks

8. It appears McOnie meets the limitations of claims 19, 24-25, 28-30 and 48-49; however, since McOnie does not describe the method steps of fixing a first part to a second part verbatim, a separate obviousness rejection was made in the interests of compact prosecution.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hendey (6,588,447) discloses a fixation ring with a weakened zone that is being used to fix two parts together.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CLINTON OSTRUP whose telephone number is (571)272-5559. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Clinton Ostrup
Examiner
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/Justine R Yu/
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